

**WASTE DISCHARGE
MONITORING REPORT NO. 1
RWQCB File No. 88-57-086(97)**

**PARCEL A
BOEING REALTY CORPORATION C-6 FACILITY
LOS ANGELES, CALIFORNIA**

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DECLARATION

I declare under penalty of perjury that the foregoing is true and correct.

Executed on the 22nd day of October, 1997 at Long Beach, California.



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SECTION 1.0

INTRODUCTION

In October 1996, Montgomery Watson (Montgomery) was retained by McDonnell Douglas Realty Company (MDRC), now the Boeing Realty Corporation, to assist with the redevelopment of Parcel A (the Site) of their C-6 facility located at 19503 South Normandie Avenue, Los Angeles, California, 90502. Figure 1 presents the C-6 facility. Figure 2 delineates the Site. The Site was formerly used to manufacture and store aircraft parts.

1.1 OVERVIEW

The Site consists of the northernmost quarter of the C-6 facility, encompassing approximately 50 acres. Demolition of the following buildings at the Site has occurred: Building 29, 33, 34, 36, 37, 40, 41, 43/44, 45, 57, 58, 61, 66-A, and 67. Information gathered during the data compilation and evaluation phase of this project indicated the presence of petroleum products and other chemicals of concern in the surface and subsurface.

A soil sampling and remedial excavation effort is being conducted in conjunction with the removal of foundations, slabs, and below-ground structures. The purpose of this effort is to assess soil quality and remove soil affected with petroleum hydrocarbons and other chemicals of concern in preparation for redevelopment of the Site. Soil which is determined to be affected with petroleum hydrocarbons and other chemicals is excavated, stockpiled, sampled, and characterized at the Site.

Stockpiled soil is subjected to Site-specific soil screening criteria to determine if the soil is suitable for use as backfill at the Site. Soil which fails a criterion is further characterized for off-site disposition as either hazardous or non-hazardous waste.

Approximately 5,300 cubic yards of non-hazardous soil was stockpiled at the Site for off-site disposition. In a letter from the Regional Water Quality Control Board (RWQCB) to Integrated Environmental Services, Inc. dated September 24, 1997 (RWQCB, 1997), the soil was approved by the RWQCB for use as daily cover at the Bradley Landfill in Sun Valley, California (RWQCB File No. 88-57-086(97)). The soil was accepted for this purpose by Waste Management, Inc., operators of the Bradley Landfill.

1.2 PURPOSE AND OBJECTIVE

This report is the first in a series of waste discharge monitoring reports documenting the off-site disposition of non-hazardous soil. The purpose and objective of this report is to:

- (1) document the soil sampling procedures used to characterize the excavated soil, and
- (2) document the transportation and disposition of the soil to Bradley Landfill in compliance with the September 24, 1997 letter from the RWQCB.

2.2 WATER LINE

A transite water line was used as part of the fire suppression system to deliver water to numerous buildings at the Site. The transite material contained asbestos and was excavated and properly disposed off-site. During removal of the transite water line, hydrocarbon-affected soil was discovered at two locations and was excavated and stockpiled. The locations of the remedial excavations are presented in Figure 3. The remedial excavations are summarized below.

Adjacent to Building 67

Hydrocarbon-affected soil along the water line adjacent to Building 67 was excavated and placed in a stockpile consisting of approximately 250 cubic yards of soil. The stockpile was designated alphabetically using the following nomenclature:

Water Line (WL) - Remedial Excavation - No.(RE - #) Stockpile Letter
WL-RE-1 Stockpile A

Adjacent to Building 36

Hydrocarbon-affected soil along the water line at Building 36 was excavated as part of the Building 36 remedial excavation activities, segregated, and placed on the end of stockpile "C". As such, this stockpiled soil was designated using the following nomenclature:

Building Number (B#) - Remedial Excavation - No.(RE - #) Stockpile Letter
B36-RE-1 Stockpile C "carve-out"

SECTION 2.0

REMEDIAL EXCAVATION STOCKPILES

Stockpiled soil described in this Waste Discharge Monitoring Report was generated from remedial excavations described below. The maximum depth of any excavation was 12 feet below grade. This section summarizes the remedial excavations and their associated tracking nomenclature.

2.1 OPEN AREA NO. 1

Open Area No. 1 is located along the eastern portion of the Site, east of former Buildings 37 and 41 and extending to the Normandie Avenue property boundary. Open Area No. 1 is so designated because of its absence of structures, except for the Building 43/44 water tanks in the northeast corner. Open Area No. 1 formerly included the Gravel Yard, which was used for storage of miscellaneous materials and parts from the manufacturing operations of the facility. Historically, a railroad spur crossed Open Area No. 1 trending from south to north.

Building 41 was formerly used as a boiler house. Water tanks formerly located at Building 43/44 in the northeast corner of Open Area No. 1 were used to store diesel fuel oil which was pumped into Building 41 through buried product pipelines. These tanks were converted from diesel storage to water tanks (part of the C-6 facility's fire suppression system) approximately 25 years ago. The abandoned product lines leading from the tanks to Building 41 were discovered during the demolition process, and remedial excavations discussed in this report were conducted to remove primarily hydrocarbon-affected soil associated with releases from these product lines. Stockpiled soil discussed in this report was excavated east of Building 37 and 41 within Open Area No. 1 as presented in Figure 3.

Remedial excavations were designated numerically beginning with the number "1". A remedial excavation continued until approximately 2,500 cubic yards of soil was excavated and stockpiled. If additional soil required removal, the additional excavation was designated by the next sequential number. Excavated soil was placed in stockpiles each consisting of approximately 250 cubic yards of soil. Stockpiles were designated alphabetically from "A" through "J" using the following nomenclature:

Open Area No. (OA#) - Remedial Excavation - No.(RE - #) Stockpile Letter
e.g., OA1-RE-4 Stockpile E

SECTION 3.0

WASTE CHARACTERIZATION

Analytical data from stockpile grab samples was used to characterize the waste soil. Additionally, hot spot and confirmation sampling employed at the Site was used to supplement waste characterization decisions. Detailed procedures for these sampling activities are outlined in the *Sampling and Analysis Plan for Demolition Activities at the Douglas Aircraft Company C-6 Facility* (IESI, 1997(a)) prepared by Integrated Environmental Services, Inc. and previously submitted to the RWQCB. These procedures can be summarized as follows:

3.1 STOCKPILE SAMPLING

Excavated soil was placed in stockpiles each consisting of approximately 250 cubic yards of soil. Generally, stockpile samples were collected at a frequency of approximately one sample per 250 cubic yards of soil removed. Stockpile samples were collected from the most noticeably affected soil within the stockpile. Samples were collected by using a shovel to cut vertically into the side of a stockpile at each sample location to expose "fresh" soil; samples were then collected from the exposed vertical wall and headspace VOC concentrations were measured using a photoionization detector (PID).

Soil samples were collected for analysis in pre-cleaned, stainless steel sleeves by driving the sleeve into the soil with a rubber mallet or drive sampler. The ends of the sleeves were then covered with Teflon film and secured with plastic end caps. A unique sample identification using the following nomenclature was written in indelible ink on a sample label and attached to the sleeve.

Source Area - Remedial Excavation No.(RE#) - Stockpile Chronological Number (SP#)

e.g., OA1-RE4-SP3

Open Area No. 1 - Remedial Excavation No. 4 - Stockpile Sample No .3

Sample sleeves were placed in a cooler with blue ice and transported under chain-of-custody to a State-certified laboratory for analysis.

Stockpile samples have been analyzed according to the analytical schedule presented in Table 1.

3.2 HOT SPOT SAMPLING

Hot spot sampling was conducted at predetermined locations where former items of concern were located (e.g., product lines), and at other locations where demolition activities revealed soil which may have been affected by petroleum hydrocarbons or other chemicals of concern.

Hot spot samples were collected by first exposing "fresh" soil beneath the surface using a stainless steel utensil or similar device. A PID was used to measure headspace organic vapor concentrations in the freshly exposed soil at each location. Soil samples were collected for analysis where at least one of the following conditions existed: 1) the headspace VOC reading exceeded 5 ppm, (2) areas where staining of the soil was visible, or (3) areas where odors were noticeable.

Soil samples were collected for analysis in pre-cleaned, stainless steel sleeves by driving the sleeve into the soil with a rubber mallet or drive sampler. The ends of the sleeves were then covered with Teflon film and secured with plastic end caps. A unique sample identification using the following nomenclature was written in indelible ink on a sample label and attached to the sleeve.

Source Area - Grab Sample (GS) - Chronological Number (#) - Sample Depth (feet)

e.g., PL-GS-5-2.5'

Pipe Line - Grab Sample No. 5 - Collected at 2.5 feet

Sample sleeves were placed in a cooler with blue ice and transported under chain-of-custody to a State-certified laboratory for analysis. Hot spot samples have been analyzed according to the analytical schedule presented in Table 1.

Hot spot sample locations discussed in this report have been subsequently excavated and data collected from these samples are considered representative of the corresponding stockpile soil quality.

3.3 CONFIRMATION SAMPLING

Confirmation samples were collected along the walls and floor of each remedial excavation to confirm that the surface soil (upper 12 feet) met the Site-specific soil screening criteria. Iterations of additional soil excavation were conducted as required until confirmation sample analytical data indicated that *in situ* soil quality met the soil screening criteria, or a maximum depth of 12 feet was reached.

Confirmation soil samples were collected by first exposing "fresh" soil beneath the surface of a wall and floor of an excavation using a stainless steel utensil or similar device. Soil samples were collected for analysis in pre-cleaned, stainless steel sleeves by driving the sleeve into the soil with a rubber mallet or drive sampler. The ends of the sleeves were then covered with Teflon film and secured with plastic end caps. A unique

sample identification using the following nomenclature was written in indelible ink on a sample label and attached to the sleeve.

Source Area - Grab Sample (GS) - Chronological Number (#) - Sample Depth (feet)

e.g., OA1-GS-42-3'

Open Area No. 1 - Grab Sample No. 42 - Collected at 3 feet

Sample sleeves were placed in a cooler with blue ice and transported under chain-of-custody to a State-certified laboratory for analysis. Confirmation samples have been analyzed according to the analytical schedule presented in Table 1; however, some confirmation sample analyses were limited to target-specific chemicals once such analytes were identified either through previous sampling activities or historical site knowledge.

Confirmation samples discussed in this report included those collected through "pot hole" excavations in the vicinity of the railroad spur within Open Area No. 1. These confirmation samples were collected to: (1) assess whether impacted soil was present, and if so, (2) to confirm the depth to clean, native soil.

Using a backhoe, soil was removed from "pot hole" excavations near the railroad spur to the depth of 4 feet where native soil was believed to occur based on PID readings, observations, and odor. Confirmation samples were collected in the soil brought to the surface in the backhoe bucket. Confirmation soil samples were collected by first exposing "fresh" soil using a stainless steel utensil or similar device. Soil samples were collected for analysis in pre-cleaned, stainless steel sleeves by driving the sleeve into the soil with a rubber mallet or drive sampler. The ends of the sleeves were then covered with Teflon film and secured with plastic end caps.

A unique sample identification using the following nomenclature was written in indelible ink on a sample label and attached to the sleeve.

Railroad Spur (RR) - Grab Sample (GS) - Chronological Number (#) - Sample Depth (feet)

e.g., RR-GS-23-4'

Sample sleeves were placed in a cooler with blue ice and transported under chain-of-custody to a State-certified laboratory for analysis. Confirmation samples have been analyzed according to the analytical schedule presented in Table 1.

Confirmation sample locations discussed in this report have been subsequently excavated and data collected from these samples are considered representative of the corresponding stockpile soil quality.

3.4 EVALUATION PROCESS

Based on the analytical data, each stockpile of soil was subjected to the Site-specific soil screening criteria presented in Figure 4. Stockpiled soil which passed all criteria was used as backfill at the Site.

Stockpiled soil which failed a Site-specific soil screening criterion was further subjected to the following waste classification procedure:

- Stockpiled soil was characterized as RCRA-listed hazardous waste if the origin of detected analytes could be determined and an analyte(s) appeared on a list of RCRA hazardous wastes per CCR Title 22. Stockpiled soil was characterized as RCRA-characteristic hazardous waste if the soil exhibited a RCRA hazardous characteristic per CCR Title 22.
- Stockpiled soils were classified as non-RCRA hazardous waste if representative soil samples contained any metal in total concentration equal to or greater than its respective TTLC per CCR Title 22. Representative soil samples were analyzed for soluble metal concentration using the Waste Extraction Test (WET) if the total concentration of any metal was equal to or greater than 10 times its respective STLC but less than its TTLC per CCR Title 22. Stockpiled soil was classified as non-RCRA hazardous waste if representative soil samples contained any metal in soluble concentration using the WET equal to or greater than its respective STLC per CCR Title 22. Additionally, representative soil samples which were analyzed using the WET were also analyzed for soluble metal concentrations using the Toxic Characteristic Leaching Procedure (TCLP). Stockpiled soil was classified as a RCRA characteristic hazardous waste if the soluble concentration of any metal was equal to or greater than the toxicity characteristic (TC).

SECTION 4.0

WASTE DISCHARGE RECORDS

Based on the analytical data, approximately 5,300 cubic yards of soil (field volume estimate) in 22 separate stockpiles failed at least one Site-specific soil screening criterion; however, this soil was further characterized as non-hazardous waste suitable for use as landfill daily cover. Documentation regarding the characterization of these stockpiles is presented in Soil Stockpile Reports (Montgomery Watson, 1997(j,k)). This non-hazardous soil contained in the following stockpiles was transported to Bradley Landfill for use as daily cover:

<u>Remedial Excavation</u>	<u>Stockpile Designation</u>	<u>Approx. Volume</u>
OA1-RE-1	Stockpile A	250 cu yds
OA1-RE-1	Stockpile B	250 cu yds
OA1-RE-1	Stockpile G	250 cu yds
OA1-RE-1	Stockpile I	250 cu yds
OA1-RE-1	Stockpile J	250 cu yds
OA1-RE-2	Stockpile A1/A2	250 cu yds
OA1-RE-2	Stockpile C	250 cu yds
OA1-RE-2	Stockpile D	250 cu yds
OA1-RE-2	Stockpile F	250 cu yds
OA1-RE-2	Stockpile H	250 cu yds
OA1-RE-2	Stockpile I	250 cu yds
OA1-RE-2	Stockpile J	250 cu yds
OA1-RE-3	Stockpile B	250 cu yds
OA1-RE-3	Stockpile C	250 cu yds
OA1-RE-3	Stockpile E	250 cu yds
OA1-RE-4	Stockpile A	250 cu yds
OA1-RE-6	Stockpile J	250 cu yds
OA1-RE-8	Stockpile I	250 cu yds
OA1-RE-9	Stockpile A	250 cu yds
OA1-RE-9	Stockpile B	250 cu yds
WL-RE-1*	Stockpile A	250 cu yds
B36-RE-1*	Stockpile C "carve-out"	50 cu yds

* Documentation regarding the characterization of these stockpiles in a Soil Stockpile Report was in preparation at the time this Waste Discharge Report was published.

The subject soil in its entirety was transported from the C-6 Facility to Bradley Landfill for use as daily cover in compliance with the RWQCB's September 24, 1997 letter (RWQCB, 1997). Analytical data summaries for these stockpiles are presented in Appendix A. Laboratory analytical reports are presented in Appendix B.

The soil was transported by truck from October 7 to October 10, 1997 over 201 truck loads. Documentation of this soil disposition is presented on stockpile soils disposal records presented in Appendix C.

SECTION 5.0

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